cabLED™

8000 Series User Manual

Flexible Linear Lighting System

The versatile indoor and outdoor water resistant lighting solution.

OPTILED

IMPORTANT SAFETY INSTRUCTIONS

WARNING: A WARNING alerts you to the possibility of serious injury or death if you do not follow the instructions.

CAUTION: A CAUTION alerts you to the possibility of damage to or destruction of the equipment if you do not follow the instructions.

IMPORTANT: An IMPORTANT alerts you to follow the instructions listed to avoid the possibility of installation error or possible damage to or destruction of the product.

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

ELECTRICAL RATING

To avoid any malfunctions of the system, and to protect against electrical shock, fire or physical injury, please observe the following:

- This system has been designed to work with 100-240 volt AC current. Connection to a line voltage other than that may create a safety and fire hazard and may damage the system. If you are unsure of the type of power supply to your home, consult your local power company or a qualified service technician.

When using electrical products, basic precautions should always be followed including the following electrical ratings for models listed below:

C8K-18-CW / C8K-18-WW : 120 V, 0.5 A ; Output : 24V, 0.75A

C8K-30-CW / C8K-30-WW : 120 V, 0.5 A ; Output : 24V, 1.25A

C8K-60-CW / C8K-60-WW : 120V, 1.0 A ; Output : 24V, 2.5A

GROUNDING INSTRUCTIONS

- This product must be grounded. If it should malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This product is equipped with a cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.
- WARNING – Improper connection of the equipment-grounding conductor is able to result in a risk of electric shock. Check with a qualified electrician or serviceman if you are in doubt as to whether the product is properly grounded. Do not modify the plug provided with the product - If it will not fit the outlet, have a proper outlet installed by a qualified electrician.

WARNING – When using outdoor use portable lighting products, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and personal injury, including the following:

Read all instructions.

- Ground Fault Circuit Interrupter (GFCI) protection should be provided on the circuits or outlet to be used for the outdoor use flexible lighting product. Receptacles are available with built-in GFCI protection for this measure of safety. If you are unsure of the type of outlet, consult a qualified service technician to install a GFCI receptacle.
- Use only outdoor extension cords, such as types SW, SOW, STW, STOW, SJW, SJOW, SJTW, or SJTOW.

Model Numbers: C8K-18-CW, C8K-30-CW, C8K-60-CW, C8K-18-WW, C8K-30-WW, C8K-60-WW.

IMPORTANT SAFETY INSTRUCTIONS

WARNING: Risk of fire and electric shock. Uncoil flexible CabLED light strip prior to plugging into receptacle.

POWER SOURCE

- Do not modify the plug provided with the product – If it will not fit the outlet, have a proper outlet installed by a qualified electrician.

Damaged or deformed power cords are hazardous and should be replaced immediately by a qualified service technician.

OPERATION

- Do not operate with the flexible light tightly coiled.
- Do not puncture, cut, shorten, or splice the flexible lighting.
- Unplug the unit and the AC power adapter from the electrical outlet during electrical storms or when unused for long periods of time to prevent damage.
- For outdoor use units, make sure that all connections and the end cap in the last segment are tightly secured to preclude the entry of water.
- Do not exceed the recommended length of CabLED strip listed for each power supply.
- Do not look directly into the LED lights when lit. They are powerful and could damage your vision.

LOCATION

- Place power supply well above the ground or in an area they will NOT be submerged in water or other liquids.
- The CabLED strip and components are rated IP65, weather proof only. Do not submerge the flexible lighting in liquids, or use the product in the vicinity of standing water or other liquids.
- Keep all components away from extreme heat sources such as heating vents, radiators, electric heaters and fire pits.
- Do not cover this product as the covering may cause the flexible light to overheat and melt or ignite.
- Do not submerge the flexible light in liquids, or use the product in the vicinity of standing water or other liquids.
- Do not route the cord or flexible lighting through walls, doors, windows or any like part of the building structure.
- Place CabLED strip so it will not shine directly into people's eyes.

INSTALLATION

Safety measures must be observed at all times during the installation of this product. Use proper safety gear and tools during the installation process to prevent physical injury.

- Products should be installed in accordance with the user manual, current electrical codes and/or the current National Electric Code (NEC). Improper installation may cause a possible shock or fire hazard.
- To avoid electrical shock and/or damage to the system, do not handle the components with wet hands.
- Always make sure the CabLED strip is disconnected from the power source before cutting, connecting, mounting or modifying in any way. Do NOT dismantle the CabLED strip itself.
- Do not coil the strip into a tight circle with a diameter less than 8 inches (20cm) or bend it in half as it may damage the LEDs embedded in the strip.
- Do not subject the flexible CabLED strip to continuous flexing.

IMPORTANT SAFETY INSTRUCTIONS

IMPORTANT: BEFORE YOU BEGIN, MAKE SURE YOU CAREFULLY READ AND UNDERSTAND THE INSTRUCTIONS IN THIS MANUAL.

INSTALLATION (CONTINUED)

- Do not use if there is any damage to the light or cord insulation. Inspect periodically.
- CabLED strip can only be cut at every 7.09 inches (18cm) and must be cut exactly on the indicated mark.
- Do not puncture, shorten, or splice the flexible lighting. Only cut the CabLED strip where indicated.
- Create a layout plan before installation. Follow steps to locate power supply and determine suitable mounting methods and required connectors and accessories. Measure and calculate the required length of CabLED before beginning installation.
- CabLED connectors have sharp pins inside. Follow instructions when handling.
- Use only CabLED connectors, mountings and power supply. Carefully follow the instructions to install and mount.
- Secure this flexible strip using only the hangers or clips provided. Do not secure this product or its cord with staples, nails, or like means that may damage the insulation.

CLEANING

- Clean only with a dry or slightly damp cloth. Do not use any acid or alkaline liquids, cleansing agents or solvents. Unplug the system from the wall outlet before cleaning.

NON-USE PERIODS

When left unused for long periods of time, the system should be unplugged from the AC outlet.

SERVICE

Always remove the AC power adapter from the electrical outlet before adjusting or inspecting the system. Inspect your system periodically.

- Do not open, dismantle or attempt to repair the CabLED strip or the bottom half of the connectors. There are no user-serviceable parts.
- Do not open the cabinets of accessories or power supply. There are no user-serviceable parts. Opening the cabinets may present a shock hazard, and any modification to the product will void your warranty.
- Do not attempt to service the components yourself. If water or any metal objects such as paper clips, wire or staples accidentally fall inside, then disconnect from the power source immediately and consult an authorized service center.

SAVE THESE INSTRUCTIONS

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Introduction

IMPORTANT: BEFORE YOU BEGIN, MAKE SURE YOU CAREFULLY READ AND UNDERSTAND THE INSTRUCTIONS IN THIS MANUAL.

The 8000 Series system includes an assortment of components to cover a variety of indoor or outdoor applications. Our goal is to make this installation easy for you. Please follow the instructions in the order presented in this manual and be sure to observe all warnings and cautions.

About This Manual

Thank you for purchasing your CabLED 8000 system. This manual is divided into sections designed to make every installation easy for you. We have provided several typical indoor and outdoor applications with helpful tips to help you visualize your potential CabLED projects.

In addition to this manual, you will find a Quick Start Guide for each component you have purchased. Although these products are designed for easy operation, before you start we suggest you review these manuals to fully understand and take advantage of all the features.

The 8000 Series offers great flexibility, therefor it is very important to begin each installation with a detailed plan. Go through the steps and options in this manual to determine the required components for your needs. Please follow the instructions in the order presented in this manual and be sure to observe all warnings and cautions.

About CabLED™ 8000 Series

The CabLED 8000 Series consists of five components, which may be combined to customize each application. All components are rated IP65, suitable for indoor or outdoor installations.

LED Strip	The flexible CabLED strip uses CREE High Brightness LED lights. They are set every inch and can be cut every 7.09 inches (18cm) up to lengths of 49.2 feet (15m). The strips are available in Cool White (6500K), a bright, bluish white generally used for task lighting and Warm White (3500K) a yellowish white more commonly used in living spaces.
Connectors	A variety of easy-to-use connectors are designed for specific uses in different installations. The connectors are used to attach sections of CabLED strip together at virtually any angle to form endless configurations, as well as connect the strip to the power supply.
Accessories	The Inline On/Off Dimmer Switch is mounted with your system, adding dimmer and power functions when connecting to an outlet not controlled by a light switch. It offers full dimming range, fades the CabLED system on and off, and retains last dimming level selected with a simple push of buttons.
Power	Every installation requires a CabLED power supply. There are twenty 24 volt power supplies available for installations worldwide. The available power supplies are separated by suitable plugs for each region. After identifying the correct region, determine the length of CabLED strip needed to select the correct power supply for each installation. If you are unsure of the correct voltage, contact a qualified electrician.
Mounting	A choice of five mounting solutions are available.

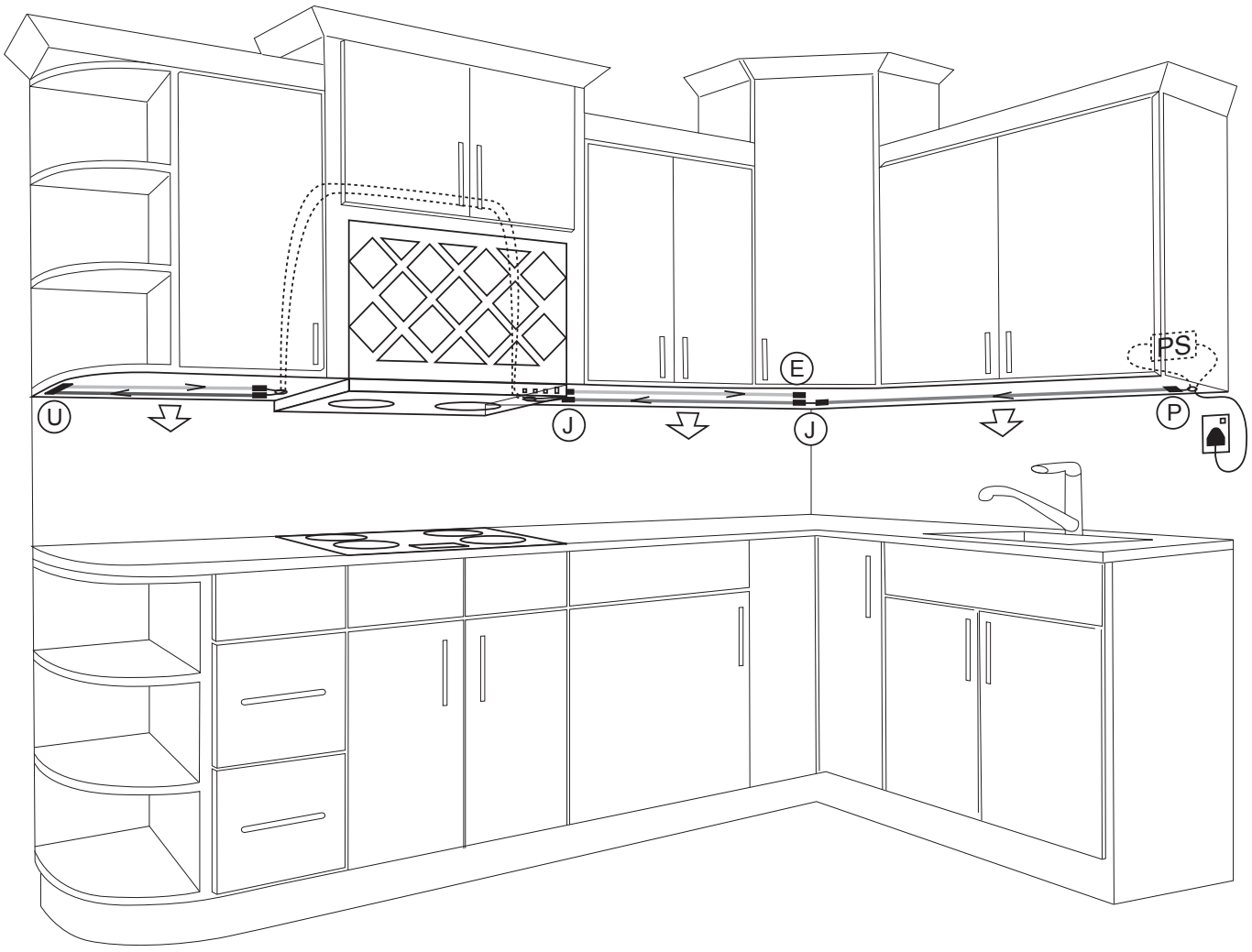
Possible Applications

Kitchen Cabinets

In this scenario, the power supply is connected to an AC outlets connected to a light switch. We have used two strips in work areas that require more light joined with a U-Connector at one end and a short Jumper Cable on the other. A longer Jumper Cable is hidden in the cabinet above the stove. The following chart lists the components used for this scenario.

Components

E	End Cap
J	Jumper Cable (There are two lengths used here)
P	PS-Link Connector
PS	Power Supply
U	U-Connector



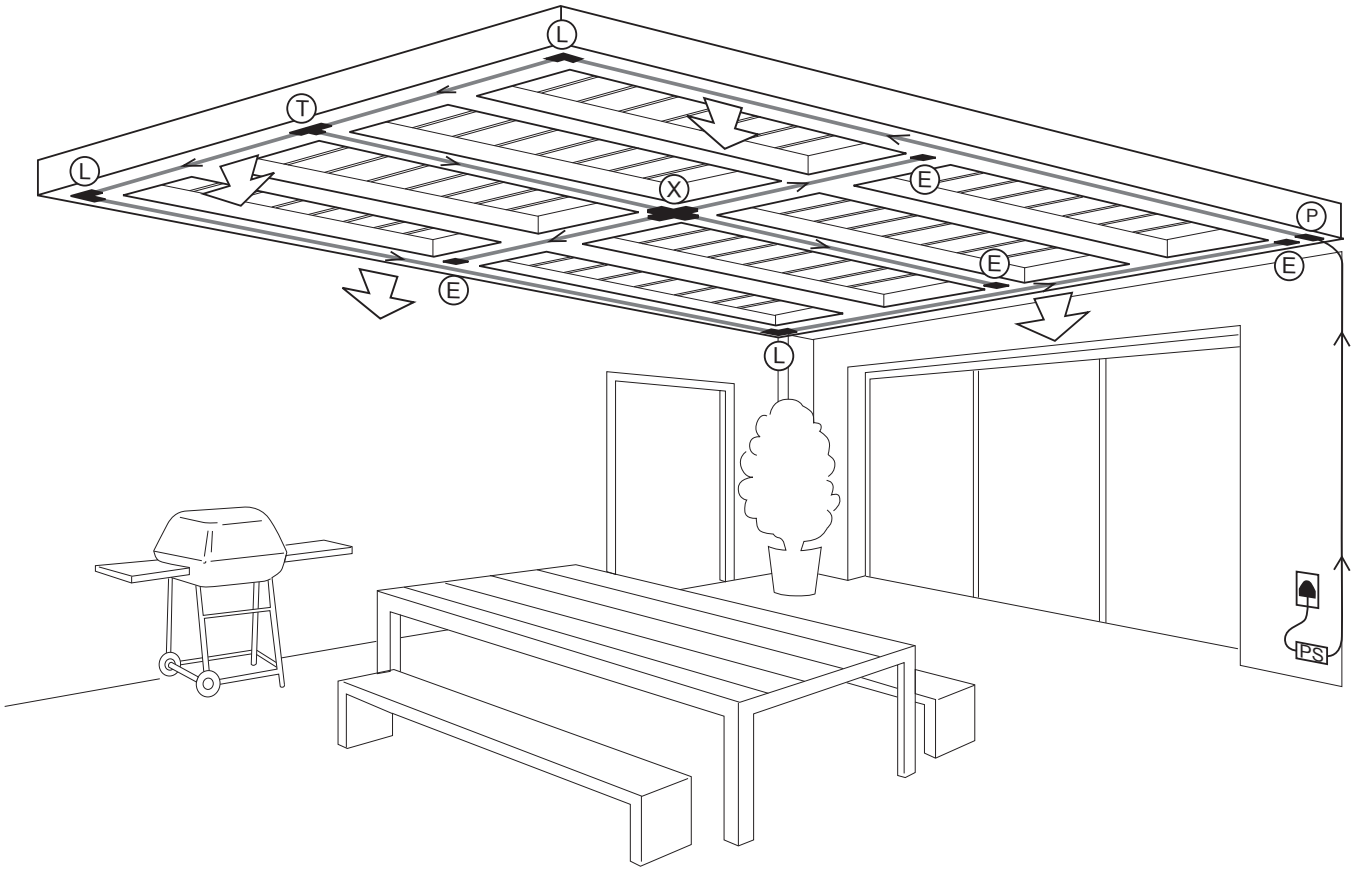
Possible Applications

Patios

This scenario turns your patio into the perfect entertainment area. The power supply is mounted well above the ground so it cannot be submerged in water. The following chart lists the components used for this scenario.

Components

E	End Cap
L	L-Connector
P	PS-Link Connector
PS	Power Supply
T	T-Connector
X	X-Connector



Possible Applications

Indoor Stairs

The CabLED strips are mounted under the lip on each step, shining the light down on the step. Use the Inline Dimmer to adjust the light level to keep your stairway softly lit. The Jumper Cables are hidden behind the steps. The following chart lists the components used for this scenario.

Components

E	End Cap
J	Jumper Cable
N	Inline Dimmer
P	PS-Link Connector
PS	Power Supply

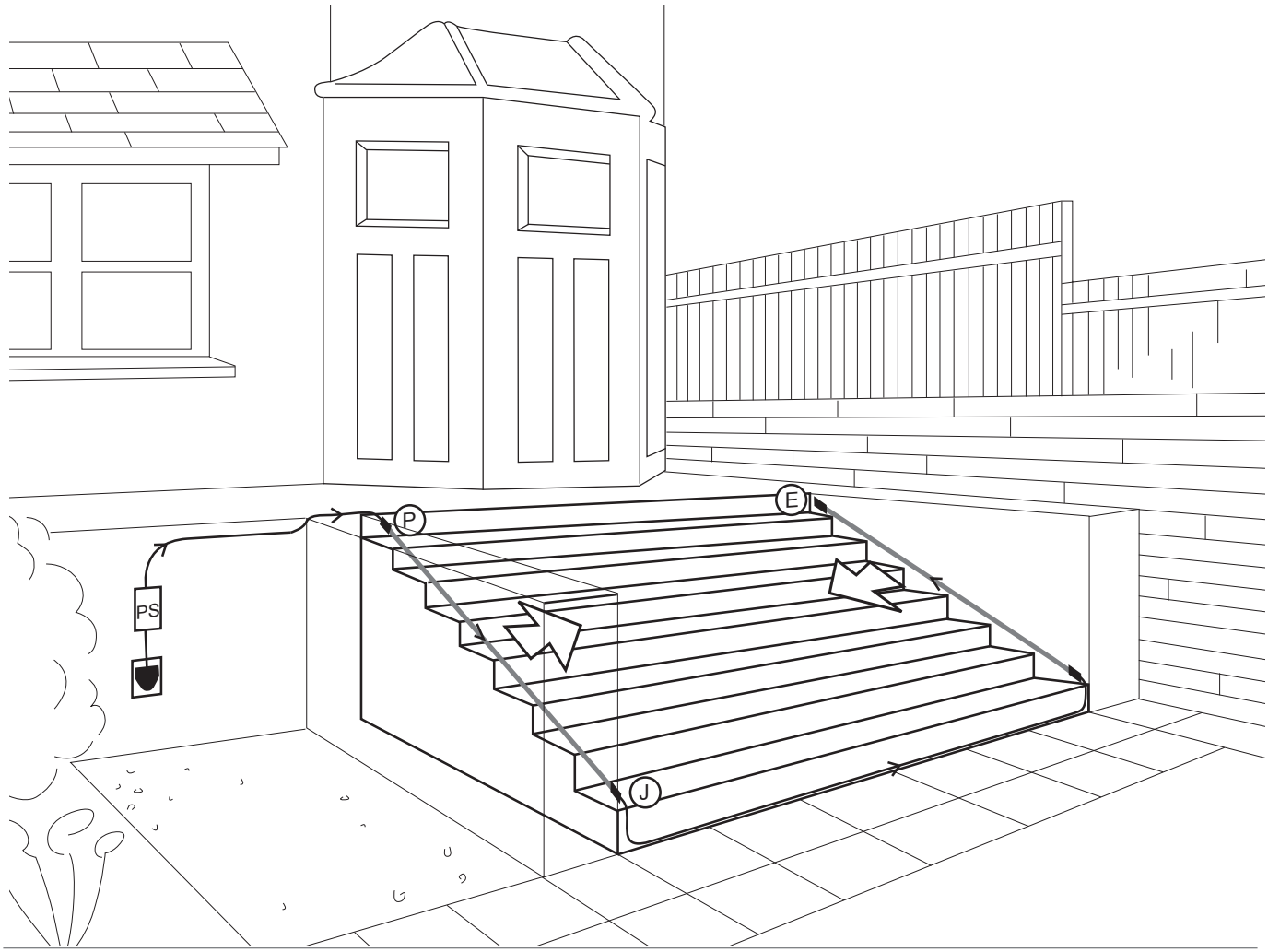
Possible Applications

Outdoor Stairs

In this scenario, the power supply is mounted well above the ground so it cannot be submerged in water. The following chart lists the components used for this scenario.

Components

E	End Cap
J	Jumper Cable
P	PS-Link Connector
PS	Power Supply



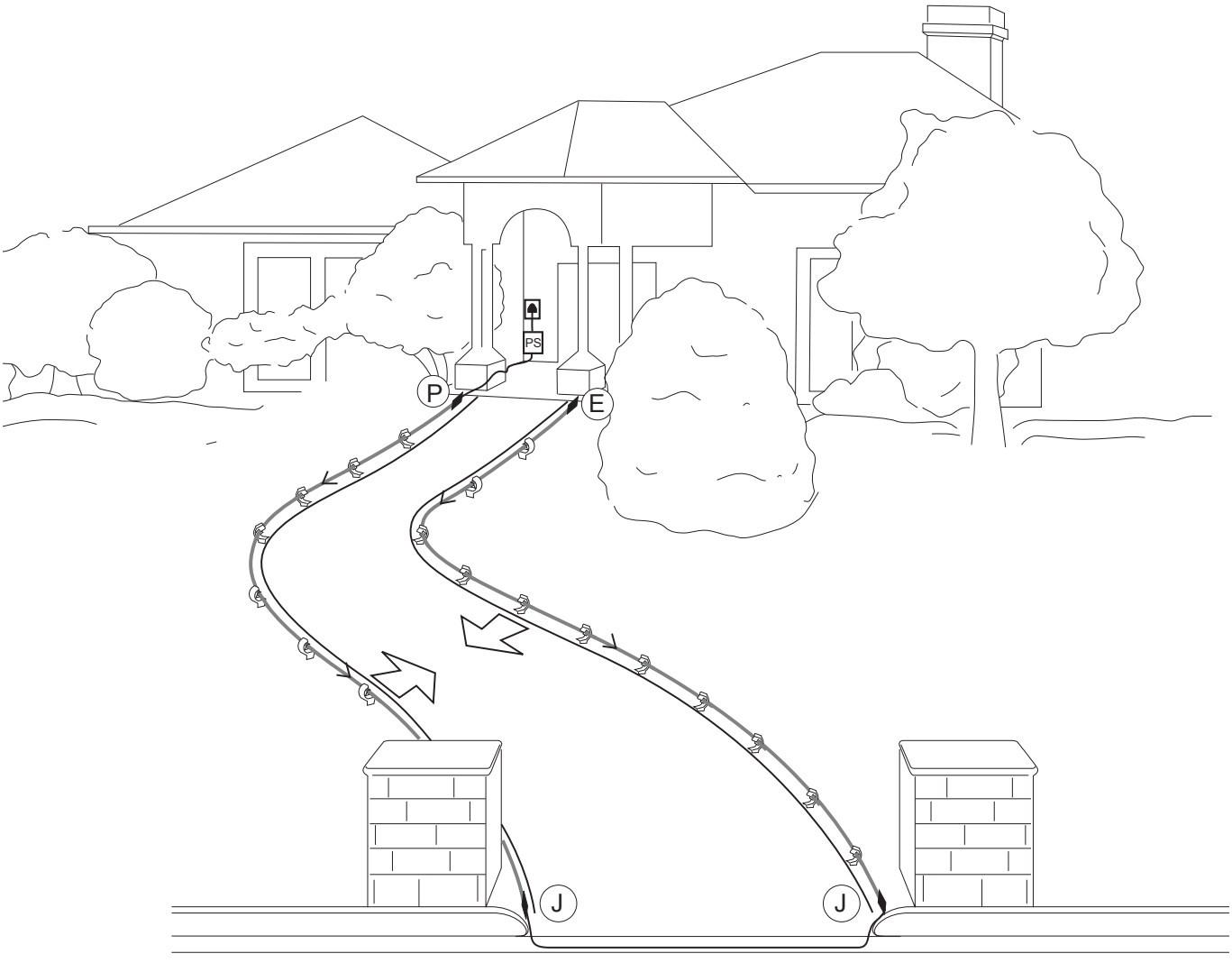
Possible Applications

Walkways

In this scenario, we have used directional Garden Stakes to mount and angle the CabLED to shine the light where it is needed, on the path. The power supply is mounted well above the ground so it cannot be submerged in water. The following chart lists the components used for this scenario.

Components

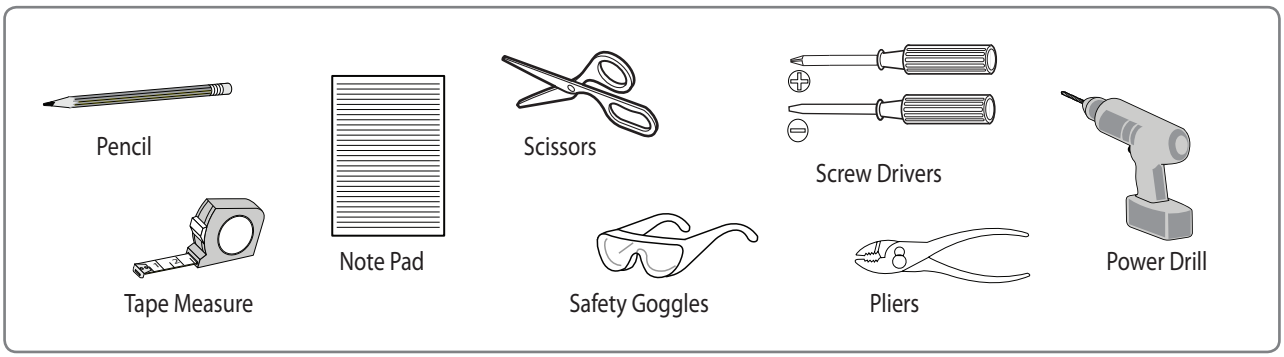
E	End Cap
J	Jumper Cable
P	PS-Link Connector
PS	Power Supply



Design Guidelines

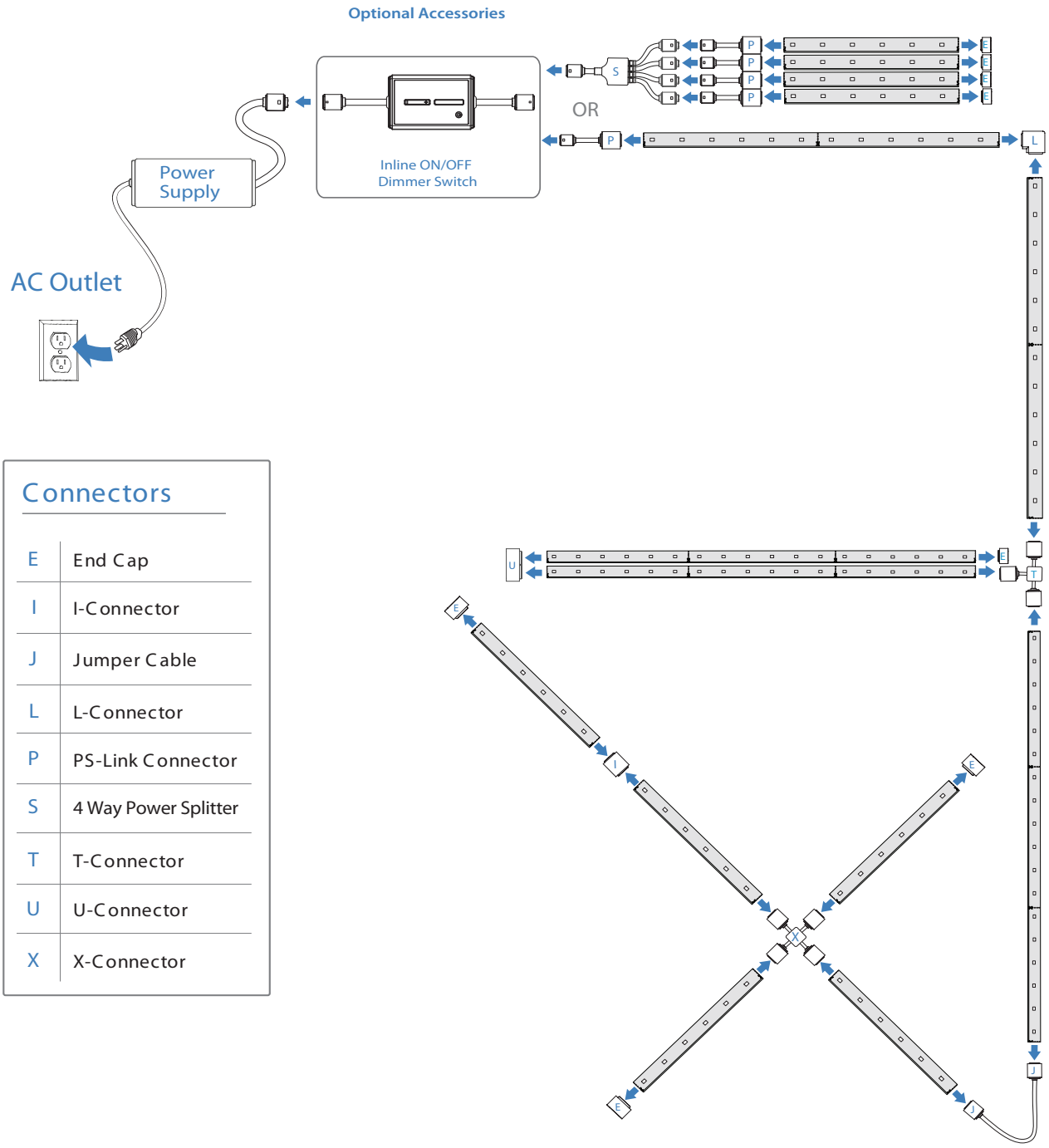
Plan Your Project	All CabLED components are rated IP65 and are designed for both indoor and outdoor use. Decide whether to use Warm or Cool White CabLED or a combination of both colors. Measure the length of each section, rounded off to the nearest 7.09 inch (18cm) interval to determine how much CabLED you will need. Do NOT cut the CabLED or push the connectors together before you are ready to install.
Power	Refer to the power supply chart to determine correct power supply. NOTE: Using an insufficient power supply will not light the system to its full potential or may cause it to flicker.
Connectors	Measure each section and adjust your project to determine the connectors you will use. Each connector has been designed for a specific purpose, but you may have a few choices for your particular needs. Use the "Component Layout" section for an overview of the connectors and how they can be used.
Installation	Follow the instructions carefully when cutting CabLED and attaching the connectors. Test your installation before mounting.
Mounting	Use one of the five mounting solutions.
Tips	Use the Trouble Shooting section when you have problems or contact our Customer Service Department.

Tools Needed



CabLED™ Component Layout

This diagram illustrates possible layouts for the CabLED 8000 Series. Refer to the Component Overview for additional information.



Connectors

E	End Cap
I	I-Connector
J	Jumper Cable
L	L-Connector
P	PS-Link Connector
S	4 Way Power Splitter
T	T-Connector
U	U-Connector
X	X-Connector

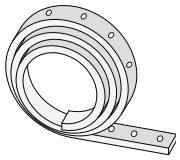
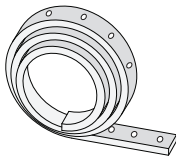
CabLED™ Component Overview

IMPORTANT: The CabLED 8000 system is designed to work ONLY with the power supplies, connectors, mounting options, and accessories listed. Do NOT substitute other products as they may damage your system.

CabLED 8000 Series consists of the following four components, which may be combined to customize each application:

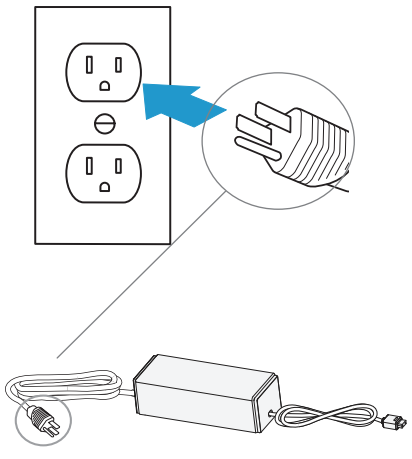
CabLED™ Strip

The flexible LED strip uses CREE High Brightness LED lights set every inch and can be cut every 7.09 inches (18cm).

Model Name/Number		Description
Cool White (6500K) 4037060105		The Cool White (6500K) LED strip, a bright, bluish white, is often used for task lighting. Each strip is 164 feet (50m) long and may be cut every 7.09 inches (18cm).
Warm White (3500K) 4037050105		The Warm White (3500K) LED strip, a yellowish white, is commonly used in living areas. Each strip is 164 feet (50m) long and may be cut every 7.09 inches (18cm).

Power Supplies

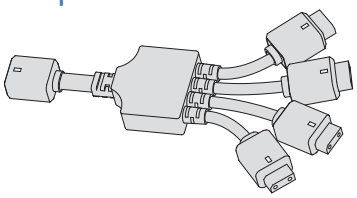
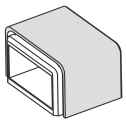
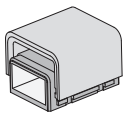
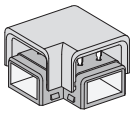
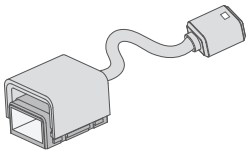
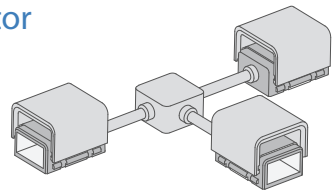
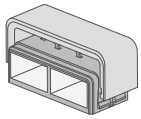
Every installation requires a CabLED power supply. There are twenty 24 volt power supplies available for installations worldwide. The available power supplies are separated by suitable plugs for each region. After identifying the correct region, determine the length of CabLED strip needed to select the correct power supply for each installation.

Region/Plug	Model Name/Number	Description
US Polarized 	18 Watt 24V Power Supply 5428101817	Provides power for CabLED strip measuring up to 14.7 feet (4.5m)
	30 Watt 24V Power Supply 5429103017	Provides power for CabLED strip measuring up to 24.6 feet (7.5m)
	60 Watt 24V Power Supply 5430106017	Provides power for CabLED strip measuring up to 49.2 feet (15m)

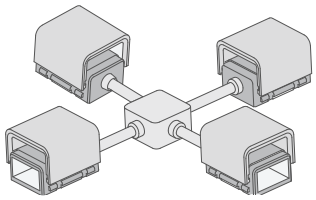
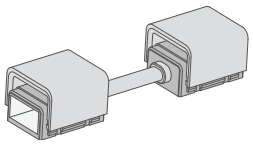
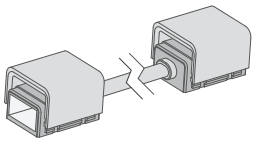
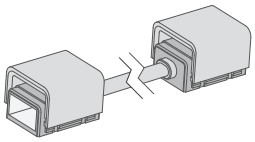
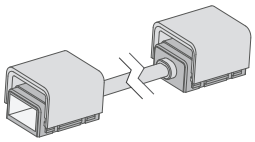
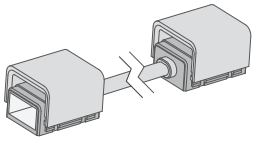
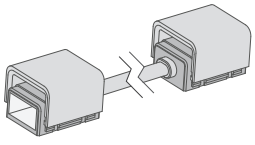
CabLED™ Component Overview

Connectors

A variety of connectors are designed for specific uses in different installations. Connectors are used to attach sections of LED strip together at various angles and connect the strip to the power supply. Of the available connectors, the PS-Link Connector and End Cap are required for every installation. All connectors are rated IP65 for use indoors or outdoors.

Model Name/Number	Description
4 Way Power Splitter 6401403905 	Connects four CabLED strips to one power supply. Install between power supply and four PS-Link Connectors.
End Cap 6401400805 	Used in ALL installations. Protects end of CabLED strip that is not connected to a connector.
I-Connector 6401400205 	Connects two lengths of CabLED strips in a straight line. Use to extend a length of CabLED strip.
L-Connector 6401400605 	Connects two CabLED strips at a right angle.
PS-Link Connector 6401400105 	Used in ALL installations. Connects CabLED strip to power supply.
T-Connector 6401401705 	Connects three CabLED strips in a flexible T shape.
U-Connector 6401400305 	Connects two CabLED strips parallel to each other for twice the brightness or a balance of warm and cool colors.

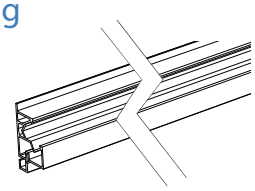
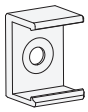
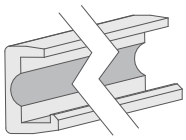
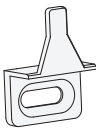
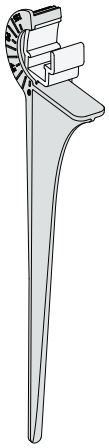
Connectors (Continued)

Model Name/Number	Description
X-Connector 6401401805 	Connects four CabLED strips at flexible right angles.
2" Jumper Cable 6401402605 	Connects two CabLED strips with a 2 inch (5cm) flexible cable.
4" Jumper Cable 6401400905 	Connects two CabLED strips with a 4 inch (10cm) flexible cable.
6" Jumper Cable 6401400705 	Connects two CabLED strips with a 6 inch (15cm) flexible cable.
12" Jumper Cable 6401401005 	Connects two CabLED strips with a 12 inch (31cm) flexible cable.
24" Jumper Cable 6401401105 	Connects two CabLED strips with a 24 inch (61cm) flexible cable.
40" Jumper Cable 6401402705 	Connects two CabLED strips with a 40 inch (101cm) flexible cable.

IMPORTANT: The connectors consist of two parts, a top and bottom, which are partially assembled at the factory. DO NOT push the connectors together before you are ready to install.

Mounting Options

A choice of five types of mounting options are available.

Model Name/Number	Description
Angle Channeling 6401402905 	Angle Channeling fits into the corner of two surfaces and directs the light at a 30 degree angle. You may install it so the light points up or down. CabLED strip snaps securely into Angle Channeling that runs the length of the installation.
Channel Bracket 6401500105 	Used in most applications. It installs easily with one screw and is barely visible after CabLED strip is snapped into place.
Channeling 6401402805 	CabLED strip lies flush and snaps securely into Channeling that runs the length of the installation.
Edge Bracket 6401500305 	Use for flush mount installations such as along a baseboard. Suitable for use in high traffic areas.
Garden Stake 6401403005 	Use for outdoor ground installations. Holds the CabLED above ground so it will not be submerged in water and adjusts to direct the angle of light from 0 to 135 degrees. May be used with Channeling.

CabLED™ Component Overview

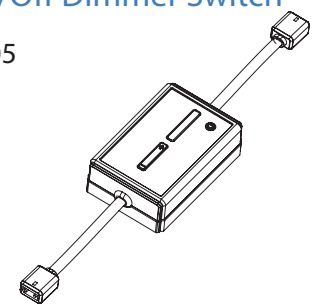
DIY CabLED™ System Kits

Each of the DIY (Do It Yourself) kits include a PS-Link Connector, End Cap, Channel Brackets and a power supply suitable for the length of CabLED strip.

Model Name/Number	Description
System 4.5 CW C8K-18-CW	This kit includes 14.7 feet (4.5m) Cool White CabLED strip, an 18W power supply, PS-Link Connector, End Cap and 15 Channel Brackets.
System 7.5 CW C8K-30-CW	This kit includes 24.6 feet (7.5m) CabLED Cool White strip, a 30W power supply, PS-Link Connector, End Cap and 25 Channel Brackets.
System 15 CW C8K-60-CW	This kit includes 49.2 feet (15m) Cool White CabLED strip, a 60W power supply, PS-Link Connector, End Cap and 50 Channel Brackets.
System 4.5 WW C8K-18-WW	This kit includes 14.7 feet (4.5m) Warm White CabLED strip, an 18W power supply, PS-Link Connector, End Cap and 15 Channel Brackets.
System 7.5 WW C8K-30-WW	This kit includes 24.6 feet (7.5m) CabLED Warm White strip, a 30W power supply, PS-Link Connector, End Cap and 25 Channel Brackets.
System 15 WW C8K-60-WW	This kit includes 49.2 feet (15m) Warm White CabLED strip, a 60W power supply, PS-Link Connector, End Cap and 50 Channel Brackets.

Accessories

Four IP65 rated accessories are available to enhance your system for either indoor or outdoor use. The RF Light/Motion Sensor and RF Remote Dimmer require at least one RF Receiver to function.

Model Name/Number	Description
Inline On/Off Dimmer Switch 6401403105 	Connects to PS-Link Connector. Offers full dimming range, fades the CabLED system on and off at last selected dimming level.

Step 1: Plan Installation

Plan Your Project

The 8000 series offers great flexibility so when you are designing your own projects, it is very important to plan each installation thoroughly before you begin. Begin planning your own installation by considering the following:

What is the Purpose of Your Project?

Think about what you want to accomplish in order to determine the best CabLED color and installation method to use.

Warm White or Cool White?

Warm White (3500K)	A yellowish white more commonly used in living spaces because it is flattering to skin tones. It is often paired with décor dominated by wood tones and warm colors and is also popular outdoors for general garden/plant lighting.
Cool White (6500K)	A bright, bluish, white generally used for lighting areas where seeing well is essential because it produces higher contrast. These include some counter areas in kitchens, reading lamps, closets and entry ways and is also popular for outdoor security lighting and walkways.

The Accessory to be used

Inline On/Off Dimmer Switch	The Inline On/Off Dimmer Switch is designed to be mounted next to the CabLED system, providing easy access to full dimming range and power on/off function. Use when the system is connected to an AC outlet not controlled by an on/off or dimmer switch.

Step 2: Prepare for Installation

IMPORTANT: The CabLED strip may ONLY be cut every 7.09 inches (18cm), indicated by a cut line on the LED side of the strip. When you are measuring for your installation, if the total length in inches is not a multiple of 7, then adjust the plan of your layout to use the nearest cut line marked on the strip.

Helpful Tips

Adjust your layout plan. After measuring each section, determine the best solution for the whole project. Review the "Component Layout" and "Possible Applications" sections for ideas on planning your project.

As you are measuring, draw you plan on paper as well. This will help you see your options and keep track of the amount of CabLED required and which connectors you will need.

2.1 Determine Components Needed

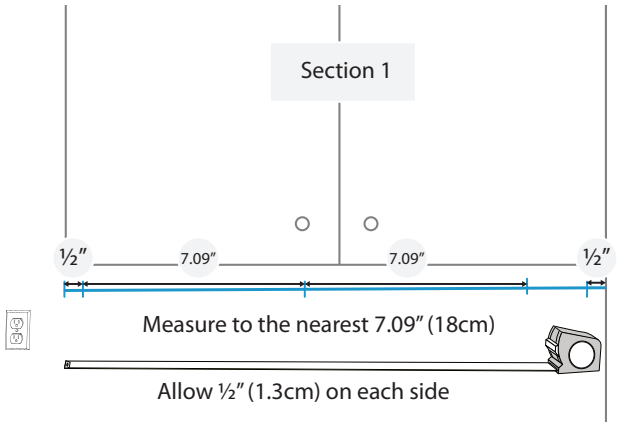
Now you should have a few things listed on your note pad. Such as what color you have decided to use, and the accessories you will use. It's time to map out the installation to determine everything else you will need.

Step 2: Prepare for Installation

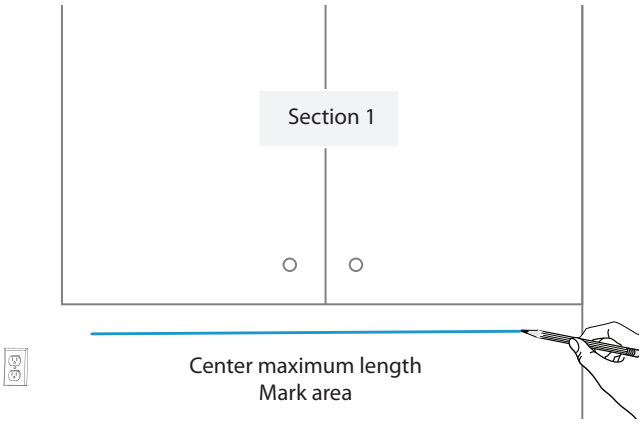
2.2 Measure and Mark the Area

Locate the AC outlet and plan to mount the power supply nearby. Mount the power supply well away from areas where it can be submerged in water and at least one foot above the ground if mounted outdoors.

A Measure carefully. The CabLED strip may ONLY be cut every 7.09 inches (18cm) and requires a half inch (1.3cm) on either side of the final length to allow for the connectors.



B Center the CabLED strip in each section. After determining the maximum length, adjust the placement so you will have balanced light.



IMPORTANT: Place power supply near outlet and off the ground so there is no chance of it being submerged in water.

2.3 Select Power Supply

Add up the amount of CabLED in each color to give you the total amount required. Using the following chart select the power supply equal to or greater than your total length so the LEDs will perform to their full capability.

Voltage-VDC	Length of CabLED	Appropriate Power Supply
24V	14.7 feet (4.5m)	18 Watt 24V Power Supply
24V	24.6 feet (7.5m)	30 Watt 24V Power Supply
24V	49.2 feet (15m)	60 Watt 24V Power Supply

NOTE: The power supplies are available with different plugs for various regions worldwide. When determining the correct model number for your installation, check the region as well as the strength.

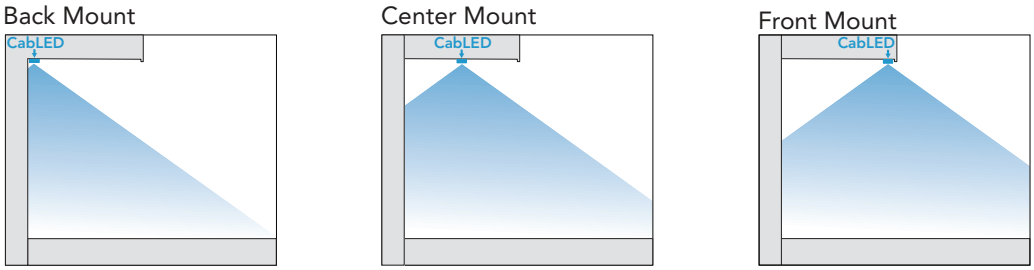
2.4 Mounting Options

When installing the CabLED strip, select one of the six mounting solutions designed for the 8000 Series. The number of brackets or length of channeling depends upon the total quantity of CabLED in the installation. Plan on using a bracket next to each connector in all sections and then spaced evenly between 12 to 16 inches (31 to 41cm) apart.

NOTE: For best effect, mount CabLED at least 1.5 inches (4cm) away from the wall.

Under Cabinets

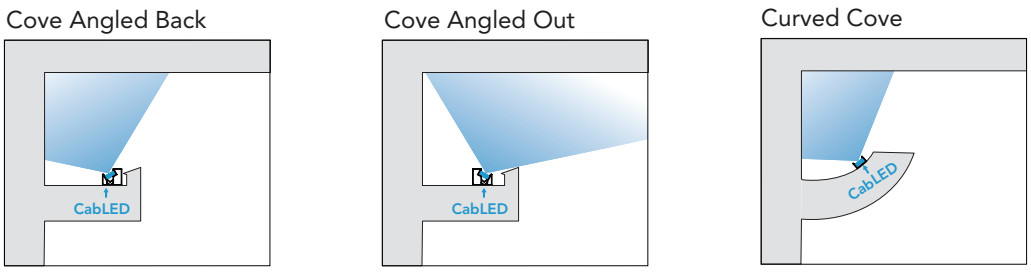
When mounting under cabinets, position CabLED strip to get the desired lighting effect.



Mounting Options: Channel Bracket or Channeling

Cove Lighting

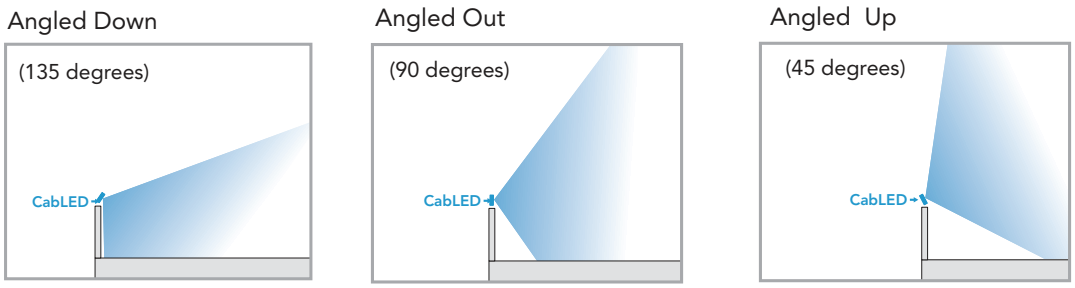
When utilized for cove lighting, position CabLED so it indirectly lights the area.



Mounting Options: Angle Channeling or Channeling

Path Lighting

When mounting along paths, use the Garden Stake and adjust light at an angle. Use with Channeling for additional support.



Mounting Options: Garden Stake with or without Channelling

Step 3: Begin Installation

3.1 Measure, Mark and Cut CabLED™

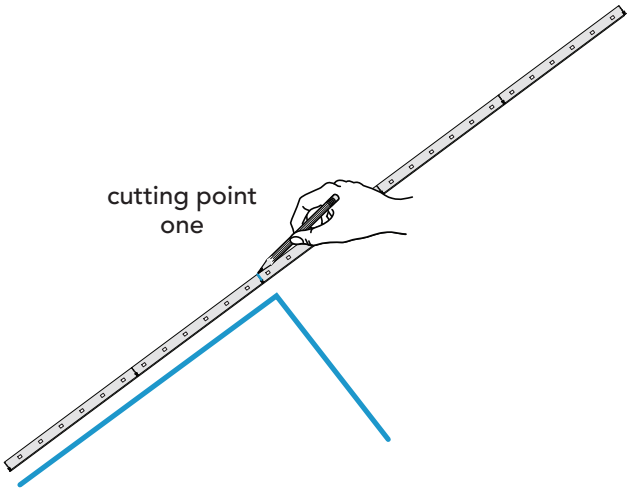
Now that you have planned where the CabLED will be placed in each section of your installation, it is important to double check before you cut each strip.

3.2 Mark CabLED™

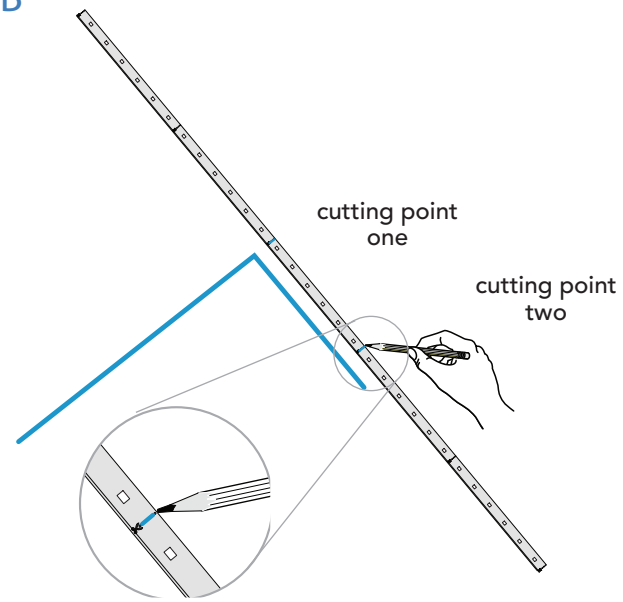
CabLED can ONLY be cut every 7.09 inches (18cm) and must be cut EXACTLY on the cut line. Hold the strip up to the surface you marked in Step 2, locate nearest cut line and mark it on the strip. Repeat for each section.

NOTE: If there is a large discrepancy in your measurements, make sure you have selected the correct components to complete your installation.

A

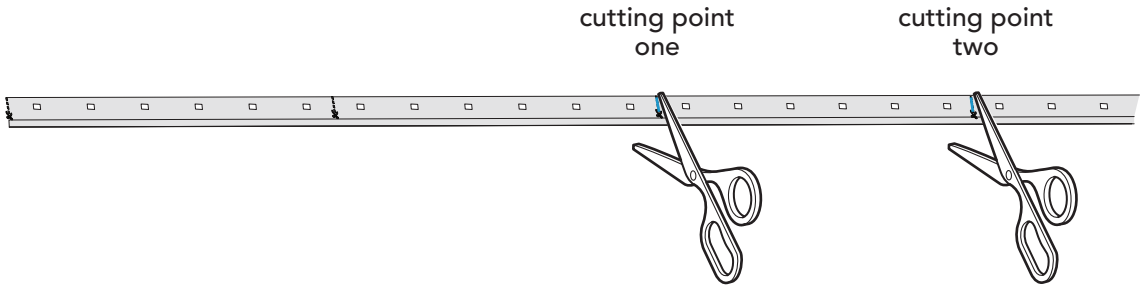


B



3.3 Cut CabLED™

Use a pair of sharp scissors to cut the CabLED strip EXACTLY on the cut lines you have marked.



IMPORTANT: The CabLED strip may ONLY be cut every 7.09 inches (18cm), indicated by a cut line on the LED side of the strip. When you are measuring for your installation, if the total length in inches is not a multiple of 7, then adjust the plan of your layout to use the nearest cut line marked on the strip.

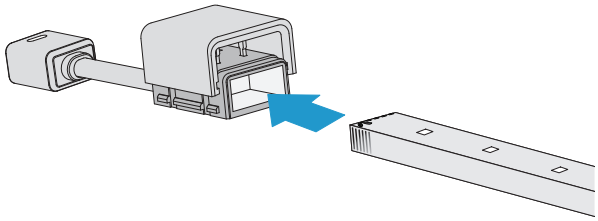
Step 4: Install Connectors

IMPORTANT: The connectors consist of two parts, a top and bottom, which are partially assembled at the factory. DO NOT push the connectors together before you are ready to install.

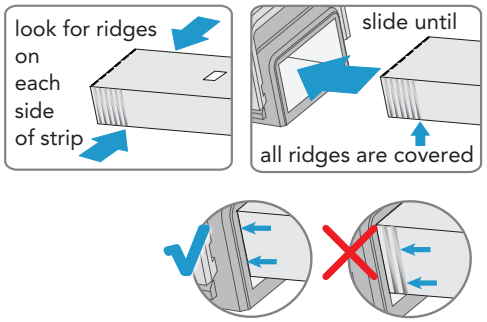
4.1 Install PS-Link Connector

The PS-Link Connector attaches the CabLED system to the power supply.

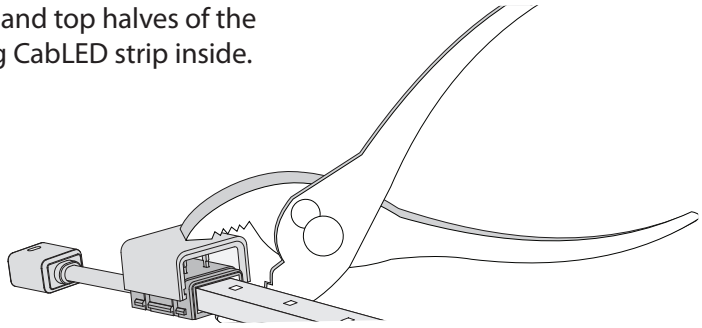
A Find the end of the LED strip that will be installed nearest to the power. Remove the protective piece from the PS-Link Connector. With LED side facing up, slide the strip into the opening in bottom half of the connector until it reaches the end.



B Push the strip completely into the connector. The ridges on each side of the strip will be covered when the strip is properly installed.

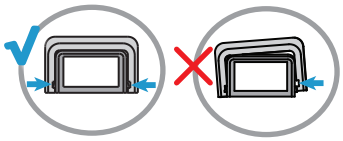


C Using pliers, apply even pressure to the bottom and top halves of the connector to push connector together, securing CabLED strip inside.



IMPORTANT: When using pliers that do not cover the entire surface of the connector, hold the connector and strip steady so the CabLED strip remains in position. Carefully rotate the pliers and apply pressure to each side of the connector, pushing the top and bottom together.

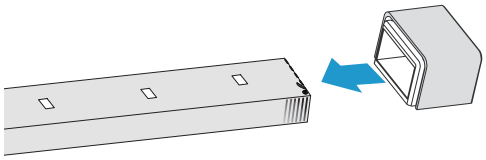
D Make sure both sides of the bottom half of the connector snap into the top half. Gently pull the LED strip to make sure you have installed it properly.



4.2 Install End Cap

The End Cap protects the side of the CabLED strip not attached to a connector.

Slide End Cap onto LED strip that will have no connector. The End Cap protects the strip.



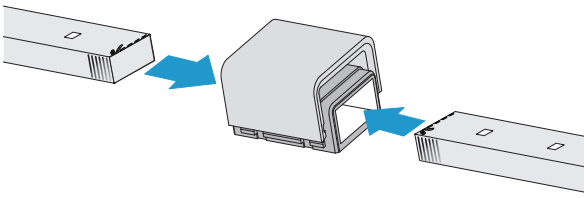
Step 4: Install Connectors

IMPORTANT: The connectors consist of two parts, a top and bottom, which are partially assembled at the factory. DO NOT push the connectors together before you are ready to install.

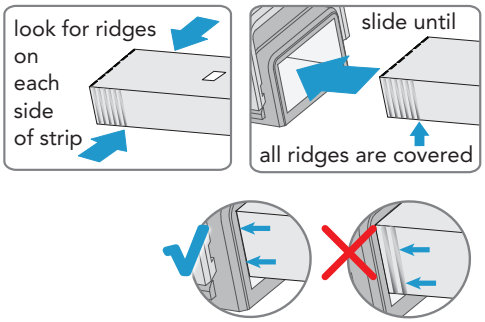
4.3 Install I-Connector

Connects two lengths of CabLED strips in a straight line. Use to add extra length to the main strip.

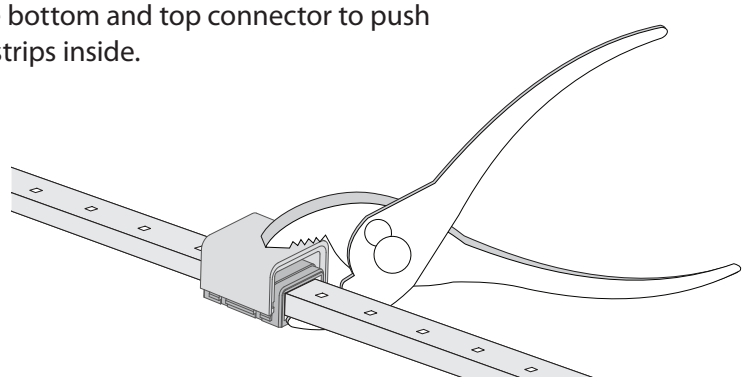
A Remove the protective piece from I-Connector. With the LED side of each strip facing up, insert one strip into one side of the I-Connector and push to the end. Insert the other strip into the other side and push it to the end.



B Push the strips completely into the connector. The ridges on each side of the strip will be covered when the strip is properly installed.

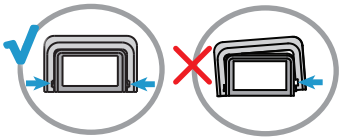


C Using pliers, apply even pressure to the bottom and top connector to push connector together, securing CabLED strips inside.



IMPORTANT: When using pliers that do not cover the entire surface of the connector, hold the connector and strip steady so the CabLED strip remains in position. Carefully rotate the pliers and apply pressure to each side of the connector, pushing the top and bottom together.

D Make sure both sides of the bottom half of the connector snap into the top half. Gently pull the CabLED strips to make sure you have installed it properly.



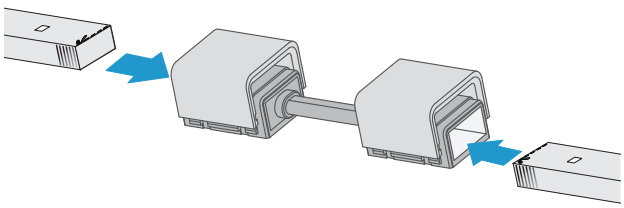
Step 4: Install Connectors

IMPORTANT: The connectors consist of two parts, a top and bottom, which are partially assembled at the factory. DO NOT push the connectors together before you are ready to install.

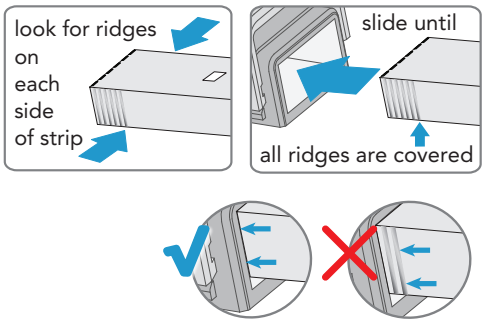
4.4 Install Jumper Cable

The Jumper Cable connects two CabLED strips with a flexible cable. They are available with 2", 4", 6", 12", 24" and 40" cables. Use the shorter lengths for connecting two CabLED strips at any angle, or when the strips do not meet at 90 degree angles after being centered to a section. The medium lengths are often used for stairs, running strips parallel with each other with space between them. The longer lengths are useful when running strips under sections of kitchen cabinets with an appliance between them, extending the system behind a larger area.

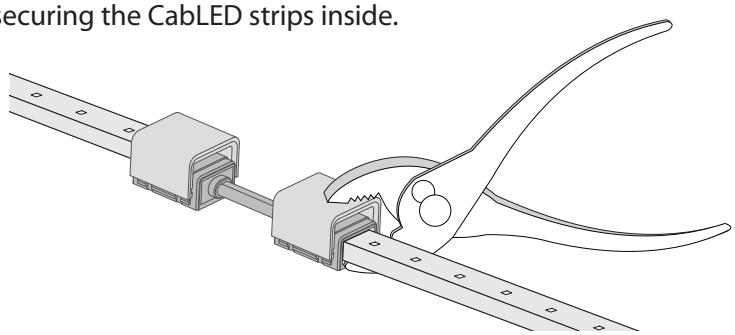
A Remove the protective piece from both sides of the Jumper Connector. With LED side facing up, slide one CabLED strip into the opening in bottom half of one side of the connector until it reaches the end. Repeat with the other CabLED strip in the other side of the connector.



B Push the strip completely into the connectors. The ridges on each side of the strip will be covered when the strip is properly installed.

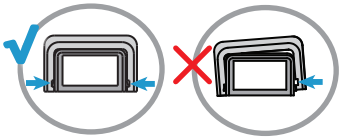


C Using pliers, apply even pressure to the bottom and top halves of each connector to push them together, securing the CabLED strips inside.



IMPORTANT: When using pliers that do not cover the entire surface of the connector, hold the connector and strip steady so the CabLED strip remains in position. Carefully rotate the pliers and apply pressure to each side of the connector, pushing the top and bottom together.

D Make sure both sides of the bottom half of the connector snap into the top half. Gently pull the CabLED strips to make sure you have installed it properly.



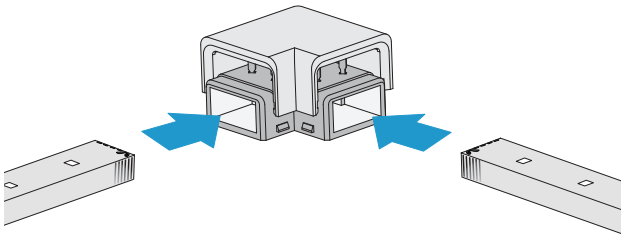
Step 4: Install Connectors

IMPORTANT: The connectors consist of two parts, a top and bottom, which are partially assembled at the factory. DO NOT push the connectors together before you are ready to install.

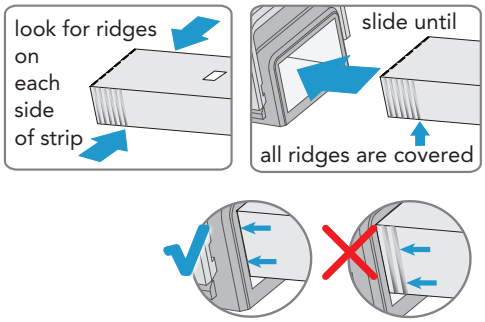
4.5 Install L-Connector

Connects two CabLED strips at a 90 degree angle to form a corner.

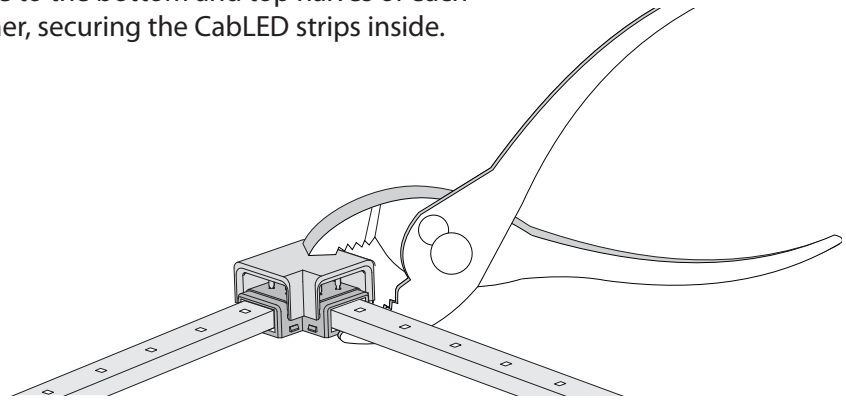
A Remove the protective piece from L-Connector. With the LED side of each strip facing up, insert one strip into one side of the L-Connector and push it to the end. Insert the other strip into the other side and push it to the end.



B Push both strips completely into the connector. The ridges on each side of the strip will be covered when the strip is properly installed.

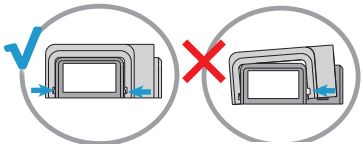


C Using pliers, apply even pressure to the bottom and top halves of each connector to push them together, securing the CabLED strips inside.



IMPORTANT: When using pliers that do not cover the entire surface of the connector, hold the connector and strip steady so the CabLED strip remains in position. Carefully rotate the pliers and apply pressure to each side of the connector, pushing the top and bottom together.

D Make sure both sides of the bottom half of the connector snap into the top half. Gently pull the CabLED strips to make sure you have installed them properly.



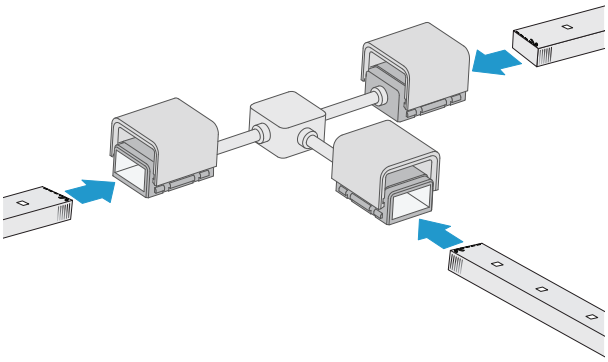
Step 4: Install Connectors

IMPORTANT: The connectors consist of two parts, a top and bottom, which are partially assembled at the factory. DO NOT push the connectors together before you are ready to install.

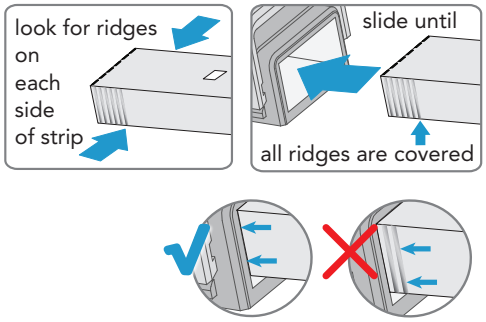
4.6 Install T-Connector

Connects three CabLED strips in a flexible T shape.

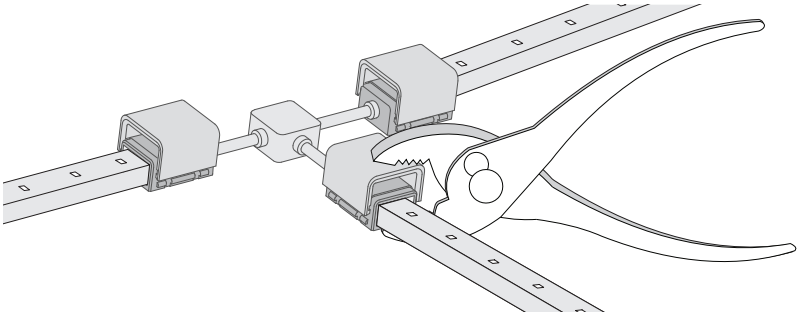
A Remove the protective piece from each side of the T-Connector. With LED side facing up, slide one CabLED strip into the opening in bottom half of one side of the connector until it reaches the end. Repeat with the other CabLED strips in the other sides of the connector.



B Push the strips completely into the connector. The ridges on each side of the strips will be covered when the strip is properly installed.

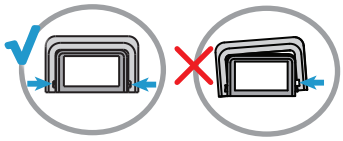


C Using pliers, apply even pressure to the bottom and top halves of each connector to push them together, securing the CabLED strips inside.



IMPORTANT: When using pliers that do not cover the entire surface of the connector, hold the connector and strip steady so the CabLED strip remains in position. Carefully rotate the pliers and apply pressure to each side of the connector, pushing the top and bottom together.

D Make sure both sides of the bottom half of the connector snap into the top half. Gently pull the CabLED strips to make sure you have installed them properly.



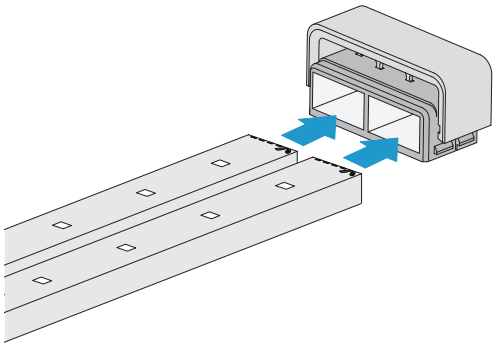
Step 4: Install Connectors

IMPORTANT: The connectors consist of two parts, a top and bottom, which are partially assembled at the factory. DO NOT push the connectors together before you are ready to install.

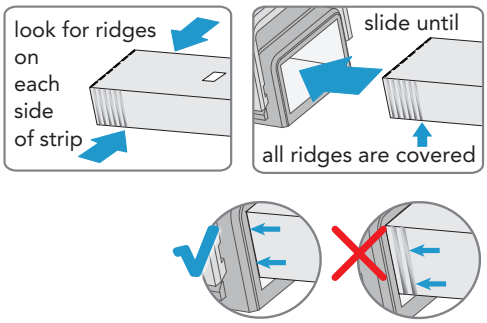
4.7 Install U-Connector

Connects two CabLED strips parallel with each other for twice the brightness or to achieve a balance of warm and cool colors.

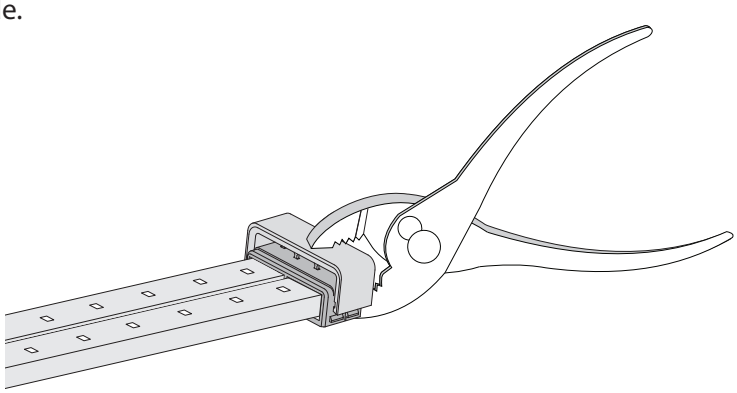
A Remove the protective piece from U-Connector. With the LED side of each strip facing up, insert each CabLED strip into the U-Connector and push to the end.



B Push both strips completely into the connector. The ridges on each side of the strips will be covered when the strip is properly installed.

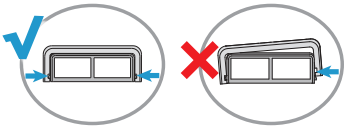


C Using pliers, apply even pressure to the bottom and top connector to push connector together, securing CabLED strips inside.



IMPORTANT: When using pliers that do not cover the entire surface of the connector, hold the connector and strip steady so the CabLED strip remains in position. Carefully rotate the pliers and apply pressure to each side of the connector, pushing the top and bottom together.

D Make sure both sides of the bottom half of the connector snap into the top half. Gently pull the CabLED strips to make sure you have installed them properly.



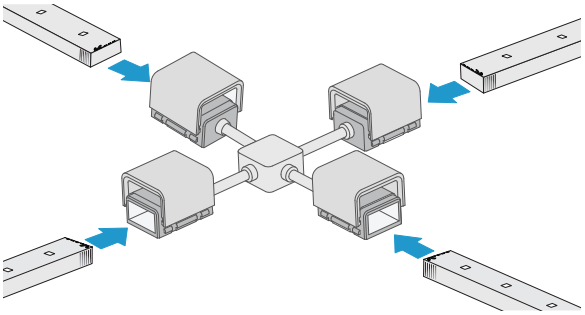
Step 4: Install Connectors

IMPORTANT: The connectors consist of two parts, a top and bottom, which are partially assembled at the factory. DO NOT push the connectors together before you are ready to install.

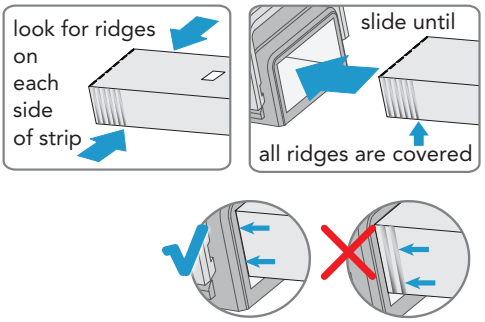
4.8 Install X-Connector

Connects four CabLED strips at flexible right angles.

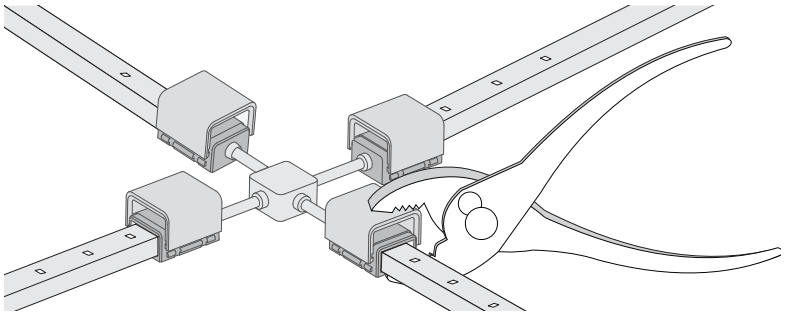
A Remove the protective piece from each side of the X-Connector. With LED side facing up, slide one CabLED strip into the opening in bottom half of one side of the connector until it reaches the end. Repeat with the other CabLED strips in the other sides of the connector.



B Push the strips completely into the connector. The ridges on each side of the strips will be covered when the strip is properly installed.

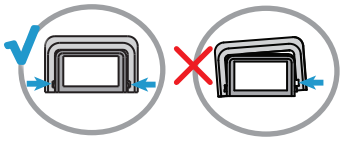


C Using pliers, apply even pressure to the bottom and top halves of each connector to push them together, securing the CabLED strips inside.



IMPORTANT: When using pliers that do not cover the entire surface of the connector, hold the connector and strip steady so the CabLED strip remains in position. Carefully rotate the pliers and apply pressure to each side of the connector, pushing the top and bottom together.

D Make sure both sides of the bottom half of the connector snap into the top half. Gently pull the CabLED strips to make sure you have installed them properly.



Step 4: Install Connectors

IMPORTANT: There is only one way to connect the 4 Way Power Splitter to the power supply and PS-Link Connectors. Make certain the icons match before connecting. Connect the 4 Way Power Splitter to the PS-Link Connectors and to the power supply BEFORE plugging the power supply into the AC outlet.

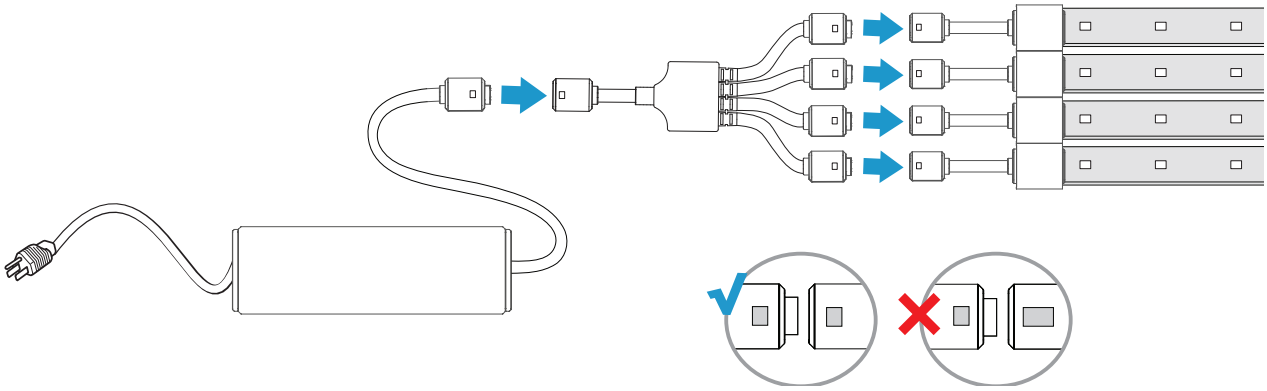
4.9 Install 4 Way Power Splitter

The 4 Way Power Splitter connects four strips of CabLED to one power supply and fits between the power supply and the PS-Link Connectors.

NOTE: Select the power supply according to the combined length of CabLED connected to the 4 Way Power Splitter. Each of the strips function independently, can be different lengths or combined with other connectors, but the maximum combined length of CabLED strip must not exceed 82 feet (25m).

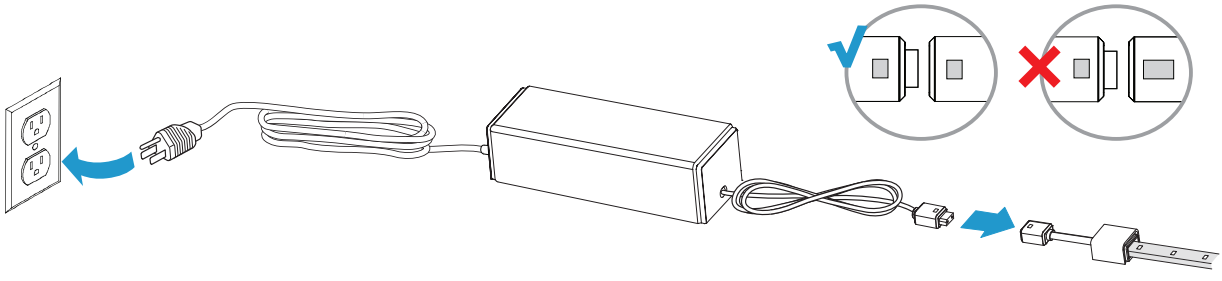
Follow the instructions in Step 4.1 to connect each strip to a PS-Link Connector. The 4 Way Power Splitter fits between the power supply and the PS-Link Connectors.

Unplug the power supply from the AC outlet before connecting. Match the icons on each PS-Link Connector with the icons on the 4 Way Power Splitter. Match the icons on the power supply with the icons on the other side of the 4 Way Power Splitter.



TEST

Matching the icons, connect the PS-Link Connector to the power supply. Plug the power supply into the AC outlet. If it works properly, unplug it and continue. If not, see the Troubleshooting section.

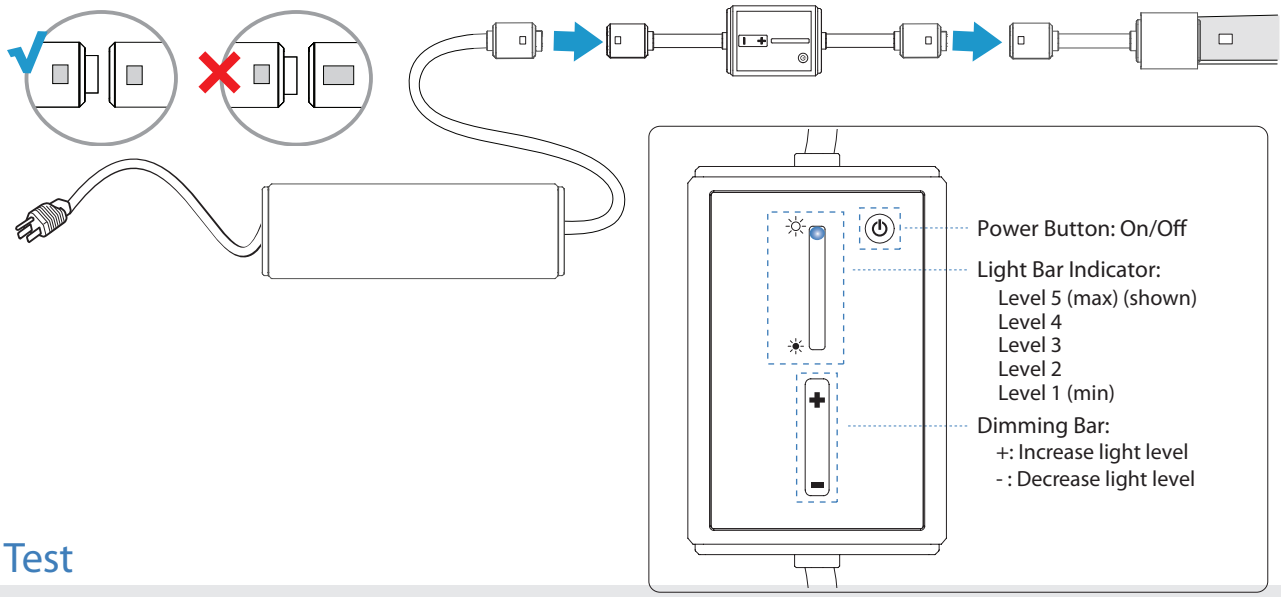


IMPORTANT: There is only one way to connect the PS-Link Connector to the power supply. Make certain the icons match before connecting. Connect the power supply to the PS-Link Connector BEFORE plugging the power supply into the AC outlet.

Step 5: Install Connectors

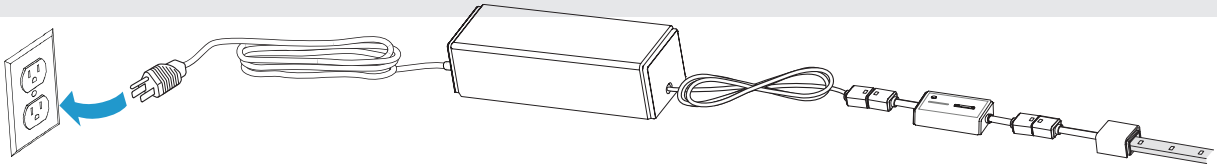
5.1 Install Inline On/Off Dimmer Switch

The Inline On/Off Dimmer Switch fits between the PS-Link Connector and the power supply. The Unplug the power supply from the AC outlet before connecting. Match the icons on the PS-Link . Connector with the icons on the Inline Dimmer. Connector with the icons on the Inline Dimmer.



Test

Plug the power supply back into the AC outlet and press the power button on the Inline Dimmer to test. If it works properly, unplug it and continue. If not, see the Troubleshooting Section.

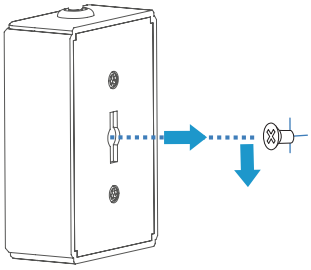


5.2 Mount Inline On/Off Dimmer Switch

Position Inline On/Off Dimmer Switch between power supply and PS-Link Connector. The Inline Dimmer uses a keyhole mounting system designed to be mounted vertically.

A Screw M4 screw partially into surface, leaving 1/4 inch to hang the Inline Dimmer.

B Fit center of keyhole in back of Inline Dimmer over screw and slide down to mount.

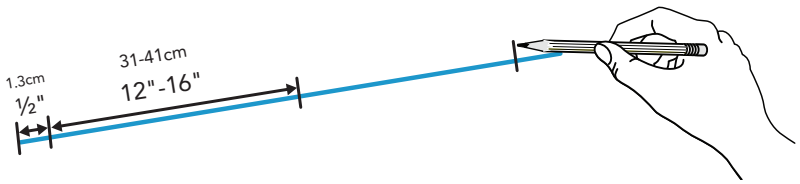


IMPORTANT: Disconnect Inline Dimmer from power supply before mounting. Mount near power supply and off the ground so there is no chance of it being submerged in water.

Step 6: Mount CabLED™

6.1 Mark Placement for Brackets

When installing the CabLED strip, select one of the six IP65 mounting solutions designed to be used with the 8000 Series for either indoors or outdoors. Plan on using a bracket next to each connector on the end of each strip in each section and then spaced evenly between 12 to 16 inches (31-41cm) apart. Allow a half inch to clear each connector.

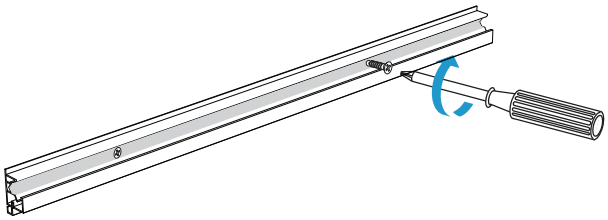


6.2 Use One of the Following Five Methods to Mount CabLED™

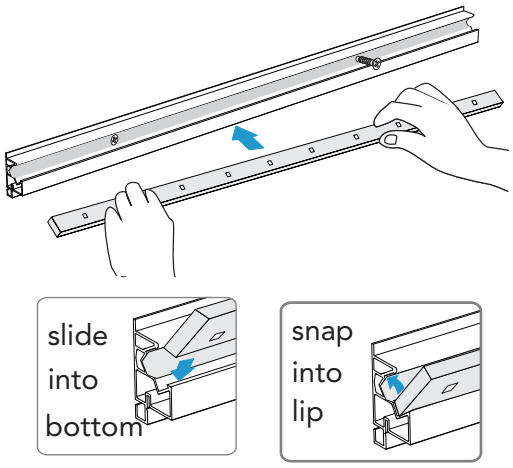
Install Angle Channeling

Angle Channeling fits into the corner of two surfaces and directs the light at a 30 degree angle. You may install it so the light points up or down. The example shows the light pointing down.

A Determine the desired direction of the light and hold Angle Channeling against surface. Secure with screw every 12 to 16 inches (31-41cm). Or apply double sided tape on the bottom of the Angle Channeling.



B Slide CabLED at an angle into the longer side of the Angle Channelling, and then push down to snap strip into place.

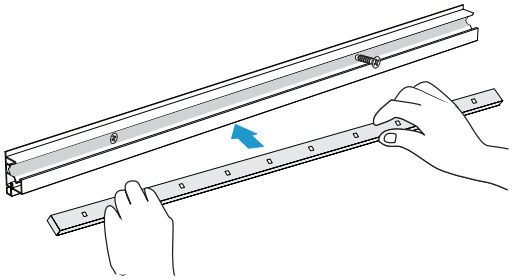


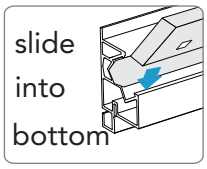
6.2 Use One of the Following Five Methods to Mount CabLED™

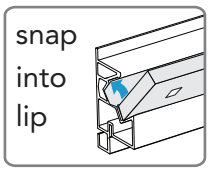
Install Double Angle Channelings

Angle Channeling fits into the corner of two surfaces and directs the light at a 30 degree angle. You may pair up two Angle Channelings with two CabLEDs for the double brightness.

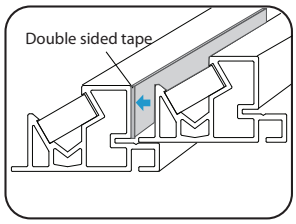
A Slide CabLED at an angle into the longer side of the Angle Channeling, and then push down to snap strip into place. Repeat fot the second Angle Channeling.

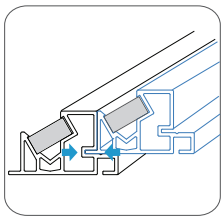




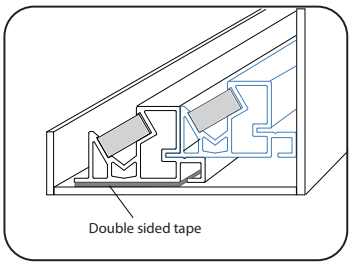


B Apply double sided tape on the back of one Angle Channeling. Fit the edge of the Angle Channeling into the slit of the second Angle Channeling to pair up two CabLEDs for double the brightness. (note : pairing maximum of two CabLED is recommended.)





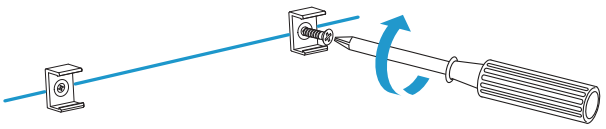
C Apply double sided tape on the bottom of the first Angle Channeling. Tape Angle Channeling onto the cove surface according to the desired direction of the light.



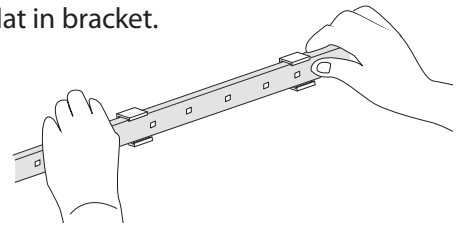
Step 6: Mount CabLED™

Install Channel Bracket

A Screw Channel Brackets into surface.

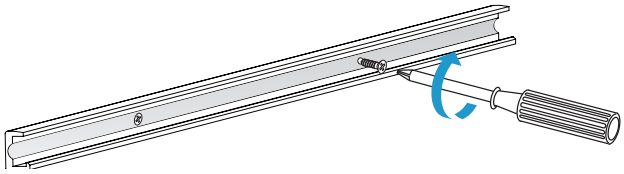


B Starting from PS-Link Connector, press CabLED strip firmly into each channel bracket. Make certain strip lies flat in bracket.

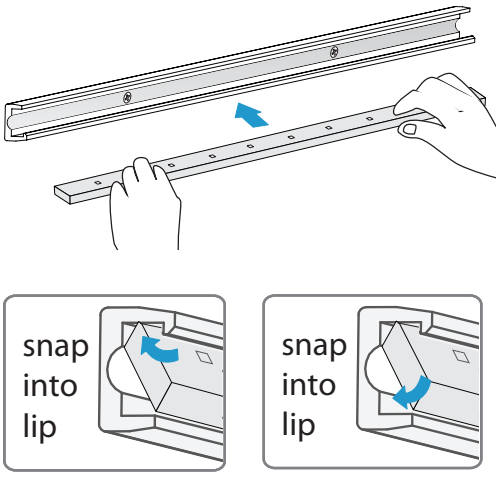


Install Channeling

A Position Channeling so lip is at bottom when installed. Hold Channeling against surface. Secure with screw every 12 to 16 inches (31-41cm).

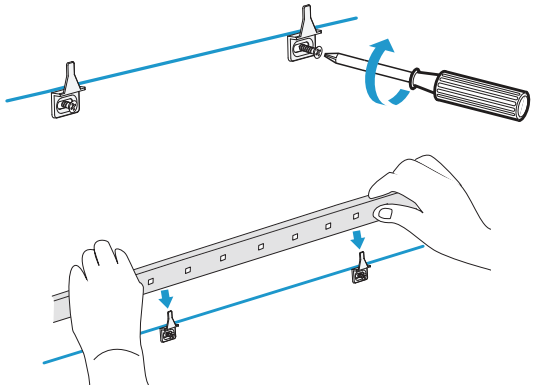


B Slide CabLED straight into top of Channeling, and then push down to snap strip into place.

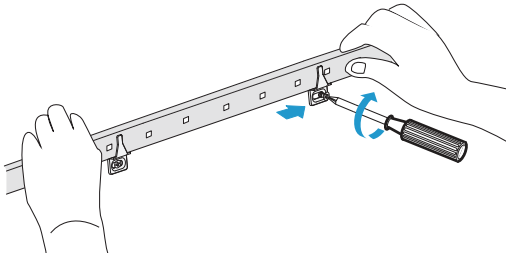


Install Edge Bracket

A Screw Edge Brackets partially into surface. Start from PS-Link Connector. Slide CabLED between bracket and surface making sure it lies flat and the bracket doesn't cover the LEDs.



B Adjust placement if necessary when tightening screws.



Step 6: Mount CabLED™

The Garden Stakes are two-piece mounts designed to hold the CabLED strips along pathways and can be set so the light is directed at an angle between 0 and 135 degrees at 11.25 degree intervals. The mounting clip is designed with two cavities to either hold the strip alone, or for added support, with the Channeling.

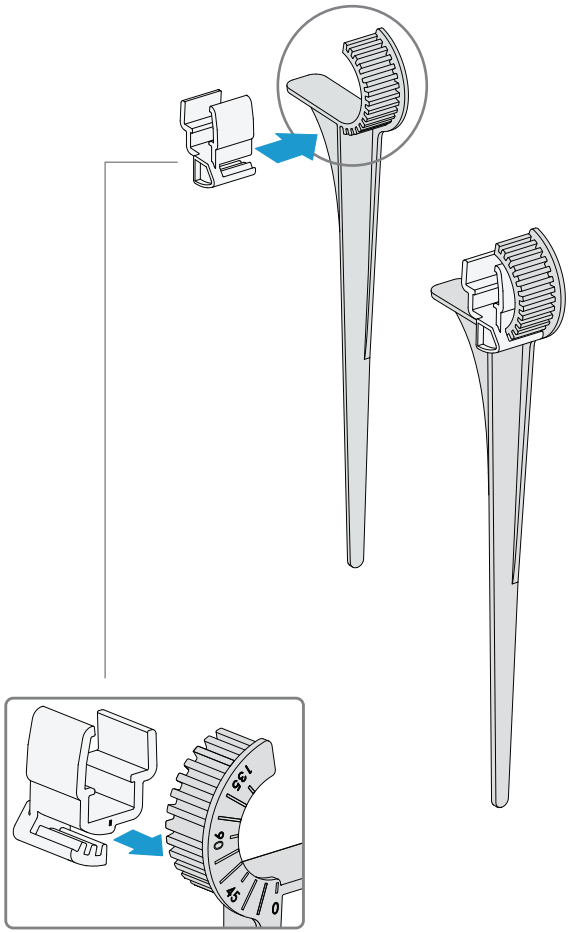
Install Garden Stake

The Garden Stake consists of two pieces, the mounting clip and the stand, which are assembled to angle the direction of the light between 0 and 135 degrees at 11.25 degree intervals.

The mounting clip, is designed with two cavities. Install the CabLED strip alone in the bottom or the CabLED strip with the Channeling into the top. Follow the instructions for each method for the easiest installation.

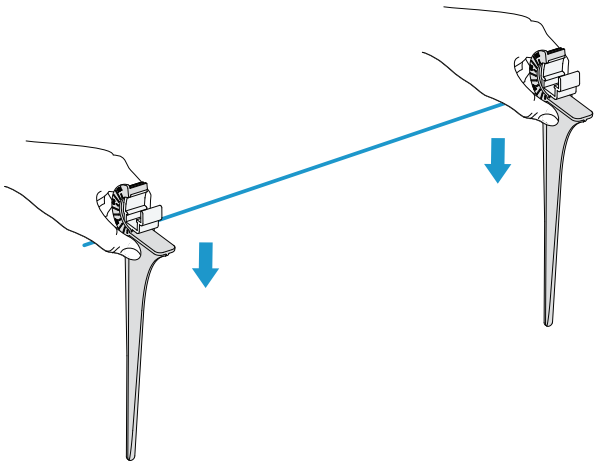
NOTE: Installation shown at 0 degree angle.

A Set the angle by fitting the mounting clip into the stand at the desired angle.

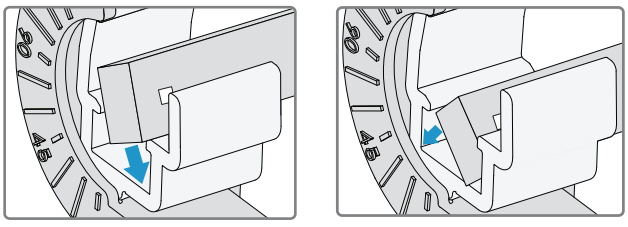


Angle marked on outside stand

B Push the stakes firmly into the ground spaced from 12 to 16 inches (31-41cm) apart.



C Insert CabLED strip into one side of bottom channel and snap into place.



Position so strip lays flat and LEDs are NOT covered when strip is installed. Reposition stake if necessary.

IMPORTANT: Use Garden Stakes where CabLED will be installed on the ground outside. Install so CabLED or connectors will NOT be submerged in water.

Step 6: Mount CabLED™

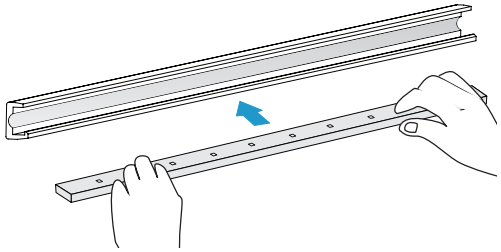
Install Garden Stake With Channeling

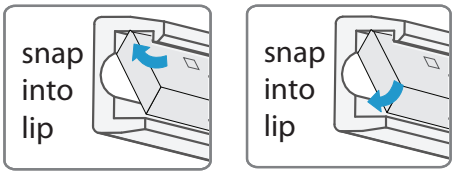
The Garden Stake consists of two pieces, the mounting clip and the stand, which are assembled to angle the direction of the light between 0 and 135 degrees at 11.25 degree intervals.

The mounting clip, is designed with two cavities. Install the CabLED strip alone in the bottom or the CabLED strip with the Channeling into the top. Follow the instructions for each method for the easiest installation

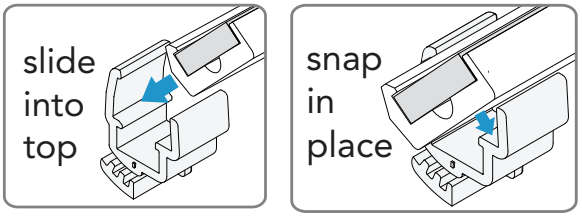
NOTE: Installation shown at 0 degree angle.

A First install the CabLED into the Channeling by sliding the strip straight into top of Channeling, and then push down to snap strip firmly and smoothly into Channeling.



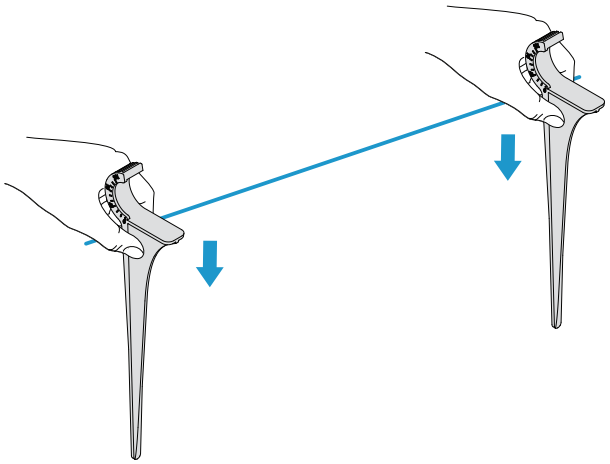


B Install Channeling into upper cavity of mounting clip. Slide in at an angle with high lip into tall side of mounting clip until it sits on ledge and then snap other end into place.

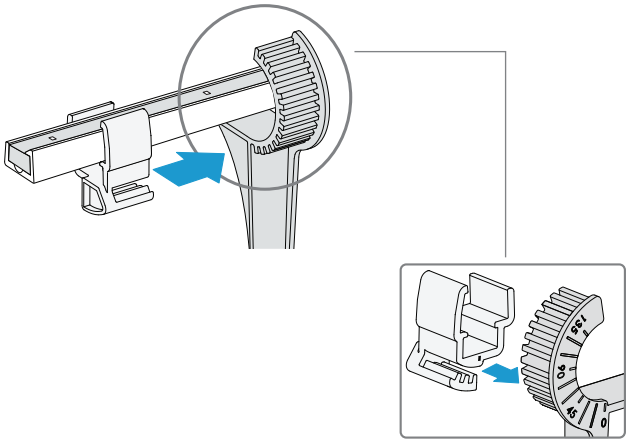


Repeat to install the mounting clips spaced the same distance you are installing the stands, between 12 to 16 inches (31-41cm) apart.

C Push the stakes firmly into the ground spaced from 12 to 16 inches (31-41cm) apart.



D Fit each mounting clip into the stake at the desired angle.



Angle marked on outside stand

Adjust Channeling if LEDs are blocked by the stand.

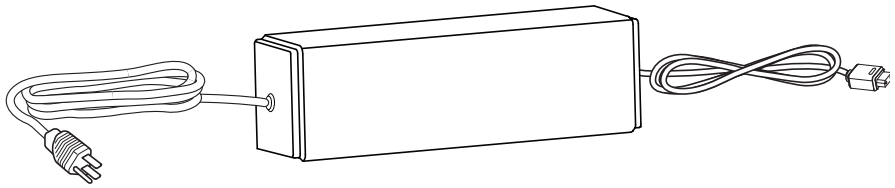
IMPORTANT: Use Garden Stakes where CabLED will be installed on the ground outside. Install so CabLED or connectors will NOT be submerged in water.

Step 7: Mount Power Supply

IMPORTANT: Do not plug into outlet until power supply is secured. Place power supply near outlet and off the ground so there is no chance of it being submerged in water.

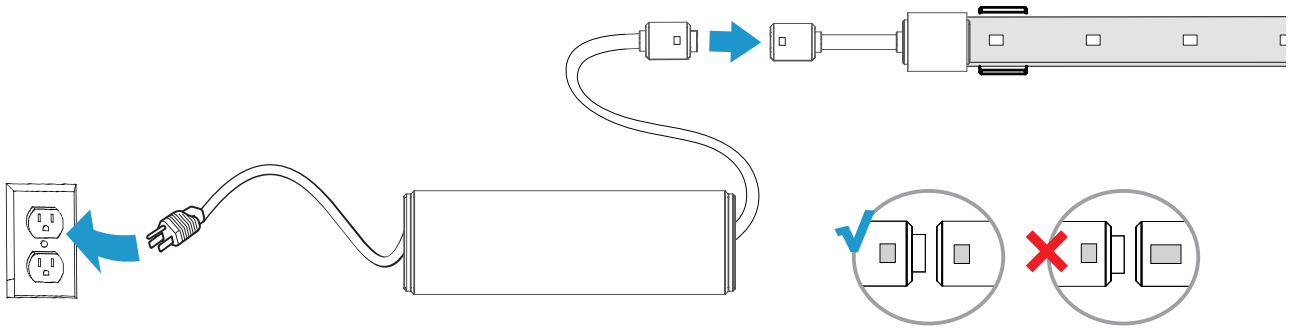
NOTE: The power supplies for use in the United States are designed to be easily mounted and removed to comply with UL standards.

Position power supply near the AC outlet. Use the two strips of industrial-grade Velcro® shipped with the power supply to install. The Velcro is suitable for indoor or outdoor installations, and allows the power supply to easily be removed easily when necessary.



Step 8: Connect to Power

Matching the icons, connect the PS-Link Connector to the power supply. Plug the power supply into the AC outlet.



IMPORTANT: Connect the power supply to the PS-Link Connector BEFORE plugging the power supply into the AC outlet.

Troubleshooting

Systems Installed Without Accessories

Most of the problems you may encounter will be caused by improper assembly. If you have any questions or need to purchase additional parts, please contact our Customer Service Department.

Issue	Go Through the Solutions
None of the LED strip is lit	• Make sure power supply is plugged in and the AC power outlet is receiving power. • Check connection from PS-Link Connector to the power supply. • Check the connection on the PS-Link Connector to the CabLED strip. Pull the strip. If it comes out of the connector, you will need a new connector.
Only part of the LED strip is lit	• Check all connectors attached to the part of the strip that is not lit. Pull the CabLED strip. If it comes out of the connector, you will need a new connector.
LED strip is flashing On and OFF	• Check the specifications for the power supply to ensure it supports the length of CabLED you are using. Select the appropriate strength or install an additional power supply to support your installation.
LED strip not cut exactly on cut line	• Depending on how you cut the strip, you may still be able to save that section. The cutting tolerance is about +/-3 mm (+/- 1/8 inch) on either side of the cut line. Cutting in a straight line is crucial and the two wires inside the strip must be pushed to the very end inside the connector to make contact with the pins. • Go to the cut line before the cut line you incorrectly cut and make the section shorter. You may be able to adjust your layout by rearranging the sections. • Contact our Customer Service Department to purchase additional CabLED strip. You can use an I-Connector to connect the additional strip.
Connectors pushed together before installation	• If you pushed the connector top into the bottom before installation or if the CabLED strip was not pushed completely to the end of the connector and did not secure the strip, you may be able to save the part. Use a flat screw driver to gently widen the sides of the top connector and push the bottom connector apart. NOTE: This may not fix the connector and you will need to use a new connector. • Contact our Customer Service Department to purchase additional connectors.

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